

METHODS FOR RENAMING STACK REFERENCES
IN A COMPUTER PROCESSING SYSTEM

ABSTRACT OF THE INVENTION

5 According to one aspect of the invention, there is
provided a method for renaming memory references to stack
locations in a computer processing system. The method
includes the steps of detecting stack references that use
architecturally defined stack access methods, and replacing
10 the stack references with references to processor-internal
registers. The architecturally defined stack access methods
include memory accesses that use one of a stack pointer, a
frame pointer, and an argument pointer. Moreover, the
architecturally defined stack access methods include push,
15 pop, and other stack manipulation operations.